Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)	File Nos. 192-SAT-AMEND-97
)	88-SAT-AMEND-98
Celsat America, Inc.)	
)	IBFS Nos. SAT-AMD-19970925-00124
)	SAT-AMD-19980123-00009
Modification of License to Authorize)	SAT-AMD-20001103-00153
Geostationary-Satellite Orbit Mobile-Satellite)	
Service Feeder Link Operations in the Ka-Band)	Call Sign S 2139

ORDER AND AUTHORIZATION

Adopted: August 2, 2001 Released: August 3, 2001

By the Chief, International Bureau:

1. By this Order, we modify Celsat America, Inc.'s ("Celsat's") license to construct and launch a two-satellite mobile-satellite system to serve the United States operating in the geostationary-satellite orbit ("GSO"), using service links¹ in the 2 GHz Mobile-Satellite Service ("MSS") band.² In particular, we modify Celsat's 2 GHz MSS License to allow it to operate its system's feeder links³ in a portion of the Ka-band.⁴ In a companion order issued today, we assign Celsat's satellites to the 121° W.L and 83° W.L. orbital locations.⁵ These authorizations facilitate implementation of Celsat's proposed system's technology and service offerings in the marketplace.

I. BACKGROUND

2. Celsat America, Inc. is a Delaware corporation⁶ owned by Celsat, Inc. (80.2% of the issued and outstanding stock), a California corporation, and Echostar DBS Corporation (17.6% of the issued and

¹ "Service links" are the radio links that transmit a user's messages in both directions between a user's earth terminal and the system's satellite(s).

² Celsat America, Inc., Order and Authorization, DA 01-1632 (Int'l Bur., rel. July 17, 2001) (Celsat 2 GHz MSS License). The term "2 GHz MSS Band" is used in this Order to refer to mobile satellite service ("MSS") in the 1990-2025 MHz (uplink) and 2165-2200 MHz (downlink) frequencies.

³ "Feeder links" are the fixed-radio links that transmit a user's messages in both directions between the system's satellite(s) and its gateway earth station(s), connecting the MSS network with the public switched telephone network. Feeder links operate in frequency bands allocated to the fixed-satellite service.

⁴ In this Order, the term "Ka-band" refers to the Earth-to-space (uplink) frequencies at 27.5-30.0 GHz and the corresponding space-to-Earth (downlink) frequencies at 17.7-20.2 GHz.

⁵ Second Round Assignment of Geostationary Satellite Orbit Locations to Fixed Satellite Service Space Stations in the Ka-Band, DA 01-1693 (Int'l Bur., rel. August 3, 2001) ("Second Round GSO Assignment Order").

⁶ Amendment to Application of Celsat America, Inc., File No. 192-SAT-AMEND-97, IBFS No. SAT-AMD-19970925-00124 at Amended Appendix C ("1997 Celsat Amendment").

outstanding stock), a Colorado corporation.⁷ Celsat is one of 12 applicants seeking authority to operate GSO satellites in the second Ka-band processing round. In May 1997, the International Bureau licensed 13 applicants to launch and operate GSO Fixed-Satellite Service ("FSS") systems as part of the first Ka-band processing round ("First Round").⁸ In October 1997, the Bureau established a second processing round ("Second Round"), inviting interested parties to file applications on or before December 22, 1997 for consideration in this round.

- 3. In designing its 2 GHz MSS system, Celsat sought to operate its feeder links in the GSO FSS portions of the Ka-band,⁹ and amended its 2 GHz MSS application so that its request to use Ka-band spectrum for feeder links could be considered in the Ka-band Second Round.¹⁰ The International Bureau recently issued an Order granting Celsat's request to operate its service links in 2 GHz MSS spectrum.¹¹
- 4. Celsat proposes to use spectrum anywhere in the Ka-band uplink frequency bands for uplink (Earth-to-space) feeder link communications. Celsat proposes to use spectrum anywhere in the Ka-band downlink frequency bands for downlink (space-to-Earth) feeder link communications. Celsat also requests authority to conduct its tracking, telemetry and command operations in the Ka-band frequencies.
- 5. The Boeing Company and Mobile Communications Holdings, Inc. filed petitions to deny Celsat's 2 GHz MSS application on the ground that Celsat seeks to use globally allocated spectrum for regional operations. The International Bureau denied both petitions to deny in the *Celsat 2 GHz MSS License*, because the Commission's 2 *GHz MSS Order* addressed that concern. A number of other comments on Celsat's 2 GHz MSS application requested a deferral of action on Celsat's Ka-band feeder link request until the resolution of the 18 GHz band plan and a resolution of this Second Round. Since the 18 GHz band plan has been resolved and these Second Round orbit location assignments have been made, those comments are now moot. PanAmSat Corporation filed a petition to deny the 2000 Celsat

¹⁴ *Id.* at 5.

 $^{^7\,}$ Amendment to Application of Celsat America, Inc., File No. SAT-AMD-20001103-00153 at Exhibit C ("2000 Celsat Amendment")

⁸ The Bureau also licensed one non-geostationary-satellite orbit ("NGSO") FSS Ka-Band system. *See Teledesic Corporation*, Order and Authorization, 12 FCC Rcd 3154 (Int'l Bur. 1997), *modified*, *Teledesic LLC*, Order and Authorization, 14 FCC Rcd 2261 (Int'l Bur. 1999).

⁹ 1997 Celsat Amendment; 2000 Celsat Amendment. MSS feeder links are by definition a type of FSS. *See* 47 C.F.R. § 2.1. As a general rule, because MSS feeder links operate with gateway stations at fixed locations, feeder links use frequencies allocated to the FSS. *See The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, 15 FCC Rcd 16127, 16158 ¶ 72 (2000) (2 GHz MSS Order).

Amendment of Celsat America, Inc., File No. 88-SAT-AMEND-98, IBFS No. SAT-AMD-19980123-00009 (filed December 19, 1997) ("1998 Celsat Amendment").

¹¹ Celsat 2 GHz MSS License, DA 01-1632.

¹² 2000 Celsat Amendment at 2 n. 6.

¹³ *Id*.

¹⁵ Celsat 2 GHz MSS License, DA 01-1632 at ¶ 23.

¹⁶ Comments of Bell Atlantic (filed May 4, 1998); Consolidated Petition To Deny, Petition To Defer and Comments of GE American Communications, Inc. (filed May 4, 1998); Comments of the Fixed Point-To-Point Communications Section, Wireless Communications Division, Telecommunications Industry Association (filed May 4, 1998).

¹⁷ See Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-(continued....)

Amendment, stating that Celsat's use of Ka-band spectrum for feeder links depended upon its ability to obtain an appropriate orbital location in the domestic arc.¹⁸ Since we assign two such locations to Celsat today, we deny that portion of PanAmSat Corporation's petition to deny directed to Celsat's application.

II. DISCUSSION

A. Qualifications

6. All applicants requesting authority to launch and operate satellite space stations must present information sufficient to establish their legal, technical, and financial qualifications to hold a Commission license. The rules set forth in Part 25 of the Commission's rules govern space station applicants and licensees, including this application for GSO MSS feeder links in the GSO FSS Ka-band frequencies. The Commission modified the Part 25 FSS rules in 1997 to incorporate the particular technical requirements for operations in the Ka-band frequencies. ¹⁹ In this and other licenses issued to Second Round applicants in the Ka-band, we will generally apply all Part 25 FSS rules, specifically noting, however, where we decide not to apply existing rules.

1. Number of Orbit Locations

7. The Commission's Part 25 FSS rules include a limit on the number of orbit locations that initially may be assigned to a qualified GSO FSS applicant.²⁰ The rules also limit the number of additional, expansion orbit locations that may be assigned to applicants with previously licensed systems using the same frequency bands.²¹ Generally, the Commission may grant a waiver of its rules in a particular case only if the relief requested would not undermine the policy objective of the rule in question, and would otherwise serve the public interest.²² The Commission waived the assignment limit rules in the first Ka-Band GSO FSS round because the applicants had agreed to an arrangement that accommodated all pending applications for space stations and left room for additional assignments.²³ In this Second Round, we have determined that we can also accommodate all pending requests for space stations with room for additional entry. We therefore again waive application of the Commission rule limiting GSO FSS orbit locations.²⁴ Consequently, we will not, as some applicants request, limit the number of assignments to Second Round applicants.

17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use, 15 FCC Rcd 13430 (2000) ("18 GHz Band Report and Order").

^{(...}continued from previous page)

¹⁸ Consolidated Petition to Deny of PanAmSat Corporation (filed December 14, 2000).

Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services ("Ka-Band FSS Rules Order"), 12 FCC Rcd 22310 (1997); Memorandum Opinion and Order, FCC 01-172 (rel. May 25, 2001) (order on petitions for clarification or reconsideration).

²⁰ 47 C.F.R. § 25.140(e).

²¹ 47 C.F.R. § 25.140(f).

²² WAIT Radio v. FCC, 418 F.2d 1153, 1157 (D.C. Cir. 1969).

²³ Ka-Band FSS Rules Order, 12 FCC Rcd at 22320 ¶ 24.

²⁴ For a more detailed discussion, see Second Round GSO Assignment Order at ¶ 17.

2. Technical Qualifications

- 8. Applicants for FSS space station authorizations must meet the technical qualification requirements set forth in the Commission's Part 25 rules. These requirements are designed primarily to implement two-degree orbital spacing between GSO FSS satellites. The Commission's two-degree spacing policy, which was established in 1983, was designed to maximize the number of satellites in orbit by ensuring that satellites in geostationary-satellite orbit can operate without causing harmful interference to other GSO satellites located as close as two degrees. ²⁵
- 9. In the *Ka-Band FSS Rules Order*, the Commission adopted its proposal to extend its two-degree spacing policy between in-orbit satellites to space stations in the Ka-band.²⁶ We believe that it remains in the public interest to maximize the number of satellites that can be accommodated in orbit by extending the Commission's existing two-degree GSO spacing policy to Ka-band orbital assignments in the Second Round. All GSO FSS licensees in the Second Round will therefore be required to be two-degree GSO spacing compliant.
- 10. Celsat indicates that its system design is consistent with operation in a two-degree spacing environment. The Second Round Ka-band applications were received subsequent to the *Ka-Band FSS Rules Order* but prior to the *18 GHz Band Report and Order*. In both Orders, rules affecting two-degree orbital spacing were adopted. We remind Celsat of its continuing obligation to meet all Part 25 rules governing system operations, including Sections 25.202 (frequencies, frequency tolerances, and emission limitations) and 25.210 (technical requirements for space stations in the Fixed-Satellite Service). Further, Celsat must meet the current Ka-band power flux-density ("PFD") levels of Section 25.208. As a condition of this authorization, Celsat must meet these revised PFD limits, which were adopted after Celsat filed its application.

3. Financial Qualifications

11. The Commission's FSS rules require that an applicant for a new fixed-satellite system possess sufficient financial resources to cover the construction, launch, and first-year operating costs of each proposed satellite.³¹ We have waived these rules, however, in those cases where we can accommodate all pending applications. The Commission's financial qualification rules are designed to prevent under-capitalized licensees from holding valuable orbit spectrum resources to the exclusion of others while they attempt to arrange financing to construct and launch the licensed system.³² Where all applicants can be accommodated, however, granting a license to an under-capitalized applicant will not

²⁵ Licensing of Space Stations in the Domestic Fixed-Satellite Service, 54 Rad. Reg. 2d (P&F) 577, 589 (1983) ("Two-Degree Spacing Order").

²⁶ Ka-Band FSS Rules Order, 12 FCC Rcd at 22320 ¶ 23.

²⁷ See Letter from Brian D. Weimer, Counsel for Celsat America, Inc. to Magalie Roman Salas, Secretary, FCC (July 16, 2001) at attached "Celsat Application Technical Information" item 21.

²⁸ 18 GHz Band Report and Order, 15 FCC Rcd 13430.

²⁹ 47 C.F.R. §§ 25.202 and 25.210.

³⁰ 47 C.F.R. § 25.208.

³¹ 47 C.F.R. § 25.140(b)-(e).

³² See generally Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626/2483.5-2500 MHz Frequency Bands, Report and Order, 9 FCC Rcd 5936, 5948 ¶ 26 (1994).

prevent another applicant from going forward.³³ In addition, there is a pro-competition public interest benefit in licensing all applicants, if possible. We waived the financial qualifications rules for the First Round applicants because all of those applicants could be accommodated in the available orbital locations and there were additional orbital locations available for future entrants.³⁴ In the accompanying *Second Round GSO Assignment Order*, we also determine that we can accommodate all pending Second Round applicants' requests for FSS space stations in the Ka-band, and still have some orbital locations available for future entrants. We therefore waive the financial qualification requirements for Second Round applicants. Consequently, it is unnecessary to rule on Celsat's financial qualifications.

B. Spectrum Assignments

1. Feeder Links

12. In the 28 GHz Band First Report and Order, the Commission adopted a band segmentation plan that designated one gigahertz of spectrum in each transmission direction for GSO FSS Ka-band systems.³⁵ For uplink (Earth-to-space) transmissions, the Commission designated 250 megahertz of spectrum between 28.35-28.6 GHz, 250 megahertz of spectrum between 29.25-29.5 GHz (shared on a coprimary basis with non-geostationary-satellite orbit ("NGSO") MSS feeder links), and 500 megahertz of spectrum between 29.5-30.0 GHz for GSO FSS operations. For downlink (space-to-Earth) communications, the Commission designated 1100 megahertz of spectrum between 17.7-18.8 GHz for GSO FSS operations (shared on a co-primary basis with terrestrial fixed-service) and 500 megahertz of spectrum between 19.7-20.2 GHz for primary GSO FSS operations. The Commission later refined the downlink plan for the frequency band between 17.7-18.8 GHz, by designating 280 megahertz of spectrum between 18.3-18.58 GHz for co-primary GSO FSS and terrestrial-fixed operations and 220 megahertz of spectrum between 18.58-18.8 GHz for primary GSO FSS operations.³⁶

13. In its 1998 Amendment, Celsat proposed to use 850 megahertz of spectrum at the 27.5-28.35 GHz frequency bands for its feeder uplinks.³⁷ Celsat later amended its application to request either 850 megahertz of spectrum at one orbit location or, alternatively, 500 megahertz of spectrum at each of two orbit locations, anywhere in the allocated Ka frequency bands.³⁸ Because this alternative request does not increase the potential for interference among Second Round applicants,³⁹ and is otherwise consistent with the service rules order in the 2 GHz MSS proceeding,⁴⁰ we consider the request in the Second Round. We therefore authorize Celsat to operate 500 megahertz of uplink spectrum at each of the 121° W.L. and 83° W.L. orbit locations in the 28.35-28.6 GHz and 29.25-29.5 GHz frequency bands, consistent with the 28

³⁴ See Ka-Band FSS Rules Order, 12 FCC Rcd at 22318 ¶ 18.

³³ Id.

Rulemaking to Amend parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, First Report and Order and Fourth Notice of Proposed Rulemaking, 11 FCC Rcd 19005 (1996) ("28 GHz Band First Report and Order").

³⁶ 18 GHz Band Report and Order, 15 FCC Rcd 13430. Stations operating in primary services are protected against interference from stations of "secondary" services. Moreover, stations operating in a secondary service cannot claim protection from harmful interference from stations of a primary service. "Co-Primary" services have equal rights to operate in particular frequencies. See 47 C.F.R §§ 2.104(d) and 2.105(c).

³⁷ 1998 Celsat Amendment at 2.

³⁸ 2000 Celsat Amendment at pp. 2-3.

³⁹ See 47 C.F.R. § 25.116

⁴⁰ 2 GHz MSS Order, 15 FCC Rcd at 16157 ¶ 71.

GHz band plan, and subject to the sharing rules adopted in the 28 GHz Band First Report and Order. Because the 250 megahertz of spectrum at 29.25-29.50 GHz is to be shared on a co-primary basis with NGSO MSS feeder links, Celsat's GSO FSS operations in this band must comply with the spectrum sharing and coordination rules set forth at Section 25.258 of the Commission's rules.⁴¹

14. In its 1998 Amendment, Celsat proposed to use 850 megahertz of spectrum in the 17.7-18.55 GHz frequency bands for its feeder downlink bands. Celsat later amended its application to request either 850 megahertz of spectrum at one orbit location or, alternatively, 500 megahertz of spectrum at each of two orbit locations, anywhere in the allocated Ka frequency bands. As with the feeder uplink assignment above, we authorize Celsat to operate 500 megahertz of downlink spectrum at each of the 121° W.L. and 83° W.L. orbit locations. Consistent with the 18 GHz band plan, we authorize Celsat to operate its feeder downlinks in 500 megahertz of downlink spectrum in the 18.3-18.8 GHz frequency band. Because the 280 megahertz of spectrum at 18.3-18.58 GHz is to be shared on a co-primary basis with terrestrial-fixed services, Celsat's GSO FSS operations in this band must be coordinated with these terrestrial operations.

15. In addition, Celsat must coordinate with the U.S. Government systems in accordance with footnote US334 to the Table of Frequency Allocations. This footnote requires coordination of commercial systems with U.S. Government GSO and NGSO FSS systems that are presently operating throughout the 17.8-20.2 GHz frequency band. These Government systems operate in accordance with the PFD limits contained in the current International Telecommunication Union ("ITU") Radio Regulations. Celsat also must comply with footnote US255 to the Table of Frequency Allocations that contains PFD limits to protect the Earth exploration satellite service (passive) for the 18.6-18.8 GHz band.

2. Tracking, Telemetry and Command

16. Under the Commission's rules, tracking, telemetry and command ("TT&C") operations may be "conducted at either or both edges of the allocated band(s)," *i.e.*, at either or both edges of a frequency band assigned to a satellite licensee for communication. Celsat proposes to insert normal on-orbit command and telemetry data into its wideband data in the Ka-band. Celsat also proposes to operate

⁴¹ 47 C.F.R. § 25.258.

⁴² 1998 Celsat Amendment at 2.

⁴³ 2000 Celsat Amendment at pp. 2-3.

 $^{^{44}}$ See 28 GHz Band First Report and Order, 11 FCC Rcd 19005, as modified in 18 GHz Band Report and Order, 15 FCC Rcd at 13443 ¶ 28.

⁴⁵ See 47 C.F.R. § 2.106 US334.

 $^{^{46}}$ See 18 GHz Band Report and Order, 15 FCC Rcd at 13473 ¶ 90. The power flux-density limits in the 18.3-18.6 GHz band are -115/-105 dB (W/m²) in any one megahertz, depending upon the angle of arrival. There are currently no PFD limits in the 19.7-20.2 GHz band. See Letter from William T. Hatch, National Telecommunications and Information Administration, to Dale Hatfield, Chief, Office of Engineering and Technology, Federal Communications Commission (March 29, 2000).

⁴⁷ 47 C.F.R § 2.106 US 255 (as revised in the *18 GHz Band Report and Order*, 15 FCC Rcd at 13489) states: In addition to any other applicable limits, the PFD across the 200 MHz band 18.6-18.8 GHz produced at the surface of the Earth by emissions from a space station under assumed free-space propagation conditions shall not exceed –95db(W/m2) for all angles of arrival. This limit may be exceeded by up to 3 dB for no more than 5% of the time.

⁴⁸ 47 C.F.R § 25.202(g).

⁴⁹ 2000 Celsat Amendment at p. 5.

transmit and receive beacons in 100 kilohertz of spectrum near the upper edge of Ka-band allocations, at 18.8 GHz and 28.6 GHz. We authorize Celsat to conduct TT&C operations in these assigned bands.

C. License Conditions

1. Milestone Schedule

17. As in all other satellite services, all Second Round Ka-band licensees will be required to adhere to a strict timetable for system implementation. This ensures that licensees are building their systems in a timely manner and that the orbit-spectrum resource is not being held by licensees unable or unwilling to proceed with their plans. The implementation schedules for GSO FSS systems in the Kaband generally track the schedules imposed in other satellite services.

18. Specifically, Section 25.145(f) of the Commission's rules requires Ka-band GSO FSS licensees "[1] to begin construction of [their] first satellite within one year of grant, [2] to begin construction of the remainder within two years of grant, [3] to launch at least one satellite into each of [their] assigned orbit locations within five years of grant, and [4] to launch the remainder of [their] satellites by the date required by the International Telecommunication Union to assure international recognition and protection of those satellites." Failure to meet any of these construction milestones will render those satellite authorizations null and void without further action by the Commission.

19. In the *Celsat 2 GHz MSS License*, the International Bureau set out implementation milestones for Celsat consistent with the schedule adopted for 2 GHz MSS systems in the 2 *GHz MSS Order*.⁵¹ The International Bureau also anticipated that the milestone schedule for Ka-band licenses might differ from Celsat's 2 GHz milestones.⁵² The Ka-band milestones do indeed differ, and we therefore modify Celsat's milestones schedule in order to preserve the status of the United States' ITU filings at Celsat's two assigned orbit locations.

20. The date by which Celsat's satellites must be "brought into use" to protect the date priority of the U.S. ITU filings for its feeder links at these orbital locations is in June 2005.⁵³ Celsat's 2 GHz milestones require it to launch its satellites into their assigned orbit locations by July 17, 2006. To address this misalignment, we require Celsat to launch its satellites into each licensed orbit location and "bring into use" all of the frequency assignments it plans to operate at those orbit locations by the ITU "bringing into use" date. This will protect the United States filings at these locations and thus, Celsat's ability to coordinate and gain international recognition for the satellites at each of its assigned orbit locations. Moreover, we do not anticipate that meeting this milestone will be unduly difficult. Under standard industry practice, it generally takes two to three years to construct and launch a satellite.⁵⁴ Celsat

⁵⁰ 47 C.F.R. § 25.145(f). See Ka-Band FSS Rules Order, 12 FCC Rcd at 22334-35 ¶ 61 & n.77 (1997).

⁵¹ Celsat 2 GHz MSS License, DA 01-1632 at ¶¶ 13, 27.

⁵² *Id.* at ¶ 13 n.38.

Specifically, the satellites at both 121° W.L. and 83° W.L. must be brought into use by June 25, 2005. ITU Radio Regulations require that these satellites be brought into use no later than nine years from the date the ITU publishes the advance publication information. The ITU initially required that these locations be brought into use within six years after receipt of their advance publication information, with an option to extend that date by an additional three years upon request. Since WRC-2000, satellite networks at orbit locations whose advance publication information was received by the ITU before November 22, 1997 have been automatically granted the optional three-year extension. Because the two orbit locations assigned to Celsat fall in this category, their June 25, 2005 bring into use date cannot be further extended.

⁵⁴ See, e.g., In the Matter of the Application of Comsat Corp., 12 FCC Rcd 12059, 12075 \P 33 n. 68 (1997) ("It has been our experience that it takes an average of two years to construct and launch a satellite....").

will have nearly four years in which to launch its satellites into their assigned locations by the ITU "bringing into use" dates.

2. International Coordination

21. In general, we will follow the applicable advance-publication, coordination, and notification procedures as set forth in the ITU Radio Regulations in coordinating Celsat's satellites with other affected administrations. We require that Celsat provide the Commission with the international coordination information required by our rules.⁵⁵ The orbit locations assigned today may be co-located or within two degrees of a non-U.S. licensed satellite filing having date priority in its ITU filings. Under these circumstances, U.S. licensees assigned to these locations are reminded that they take these licenses subject to the outcome of the international coordination process, and that the Commission is not responsible for the success or failure of the required international coordination.

III. CONCLUSION

22. Upon review of Celsat's application, we find that Celsat is qualified to be a Commission licensee and that, pursuant to Section 309 of the Communications Act of 1934, as amended, 47 U.S.C. § 309, grant of this application will serve the public interest, convenience, and necessity. As specified in the *Second Round GSO Assignment Order*, we have assigned Celsat to the 121° W.L. and 83° W.L. orbital locations.

IV. ORDERING CLAUSES

- 23. Accordingly, IT IS ORDERED that Application File Nos. 192-SAT-AMEND-97 and 88-SAT-AMEND-98; IBFS Nos. SAT-AMD-19970925-00124, SAT-AMD-19980113-00009, and SAT-AMD-20001103-00153 ARE GRANTED IN PART, as indicated herein.
- 24. IT IS FURTHER ORDERED that the Consolidated Petition to Deny of PanAmSat Corporation IS DENIED IN PART, as indicated herein.
- 25. IT IS FURTHER ORDERED that the license granted to Celsat America, Inc. in Order and Authorization, DA 01-1632 (Int'l Bur., rel. July 17, 2001) ("Celsat 2 GHz MSS License") IS MODIFIED to authorize Celsat America, Inc. to launch and operate one geostationary-satellite orbit satellite at each of the 121° W.L. and 83° W.L. orbit locations for provision of 2 GHz MSS service in the United States in accordance with the terms and conditions of the Celsat 2 GHz MSS License, and to assign 500 megahertz of bandwidth in the 18.3-18.8 GHz frequency band, and 500 megahertz of bandwidth in the 28.35-28.6 GHz and 29.25-29.5 GHz frequency bands for feeder link operations.
- 26. IT IS FURTHER ORDERED that the *Celsat 2 GHz MSS License*, as modified herein, shall become NULL and VOID with no further action on the Commission's part in the event the space station is not constructed, launched, and placed into operation in accordance with the technical parameters and terms and conditions of the authorization by the following dates, which supersede the milestone schedule set forth at Paragraph 27 of the *Celsat 2 GHz MSS License*:

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⁵⁵ See 47 C.F.R. § 25.111(b). See also Celsat 2 GHz MSS License, DA 01-1632 at ¶ 30.

Milestone	Deadline
Enter Non-contingent Satellite Manufacturing Contract	July 17, 2002
Complete Critical Design Review	July 17, 2003
Begin Physical Construction of All Satellites	July 17, 2004
Complete Construction of All Satellites, Launch Them Into Their Assigned Orbital Location, and Bring Frequencies Into Use	June 25, 2005
Certify Entire System Operational	July 17, 2007

- 27. IT IS FURTHER ORDERED that Celsat America, Inc. is subject to all terms and conditions in the *Celsat 2 GHz MSS License*, unless modified herein.
- 28. IT IS FURTHER ORDERED that Celsat America, Inc. must coordinate its Ka-band feeder downlink operations with U.S. Government systems, including Government operations to earth stations in foreign countries, in accordance with footnote US334 to the Table of Frequency Allocations, 47 C.F.R. \S 2.106, and in accordance with the *18 GHz Band Report and Order*, 15 FCC Rcd at 13473 \P 90.
- 29. IT IS FURTHER ORDERED that Celsat America, Inc. shall conduct its operations pursuant to this authorization in a manner consistent with the power flux-density requirements of 47 C.F.R. §2.106 US255 and 47 C.F.R. §25.208.
- 30. IT IS FURTHER ORDERED that Celsat America, Inc. will coordinate all transfer-orbit tracking, telemetry and command operations with all potentially affected in-orbit U.S. licensees and foreign-licensed satellite systems, and that these tracking, telemetry and command operations will not cause harmful interference to or receive protection from other services or satellite systems operating in accordance with the International Telecommunication Union Radio Regulations.
- 31. IT IS FURTHER ORDERED that the temporary assignment of any orbital location to Celsat America, Inc. is subject to change by summary order of the Commission on 30 days notice and does not confer any permanent right to use the orbit and spectrum. Neither this authorization nor any right granted by this authorization, shall be transferred, assigned or disposed of in any manner, voluntarily or involuntarily, or by transfer of control of any corporation holding this authorization, to any person except upon application to the Commission and upon a finding by the Commission that the public interest, convenience and necessity will be served thereby.
- 32. IT IS FURTHER ORDERED that Celsat America, Inc. is afforded 30 days from the date of the release of this Order to decline this authorization as conditioned. Failure to respond within that period will constitute formal acceptance of the authorization as conditioned.
- 33. This Order is issued pursuant to Section 0.261 of the Commission's rule on delegations of authority, 47 C.F.R. § 0.261, and is effective upon release. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the date of public notice of this Order (see 47 C.F.R. § 1.4(b)(2)).

FEDERAL COMMUNICATIONS COMMISSION

Donald Abelson Chief, International Bureau